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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,575	04/14/2004	John Laurence Melanson	1369-CA-C1 (P233C1)	6552
7590	04/05/2005			
Winstead Sechrest & Minick P.C. P.O. Box 50784 Dallas, TX 75201			EXAMINER YOUNG, BRIAN K	
			ART UNIT 2819	PAPER NUMBER

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,575

Applicant(s)

MELANSON, JOHN LAURENCE

Examiner

Brian Young

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-56 is/are allowed.
- 6) ☒ Claim(s) 57 is/are rejected.
- 7) ☒ Claim(s) 58-62 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 57 is rejected under 35 U.S.C. 102(b) as being anticipated by Cressey.

Cressey discloses a digital data modulator and digital-to-analog converter selectably generating differential phase shift keyed (PSK) data signals and frequency shift keyed (FSK) data signals is disclosed. A clock generator (10) provides carrier frequency clock signals and a plurality of phase-shifted high frequency clock signals. A CLX generator (11) selects the proper PSK or FSK carrier clock. A data scrambler (17) accepts a serial data input stream and provides the scrambled dibit to the dibit encoder (12). The dibit encoder (12) converts the scrambled dibit into two phase-shifting control signals. A three-tap finite impulse response filter (13) generates carrier phase signals by splitting each cycle of the selected carrier clock into eight phases, and, for PSK operation, provides phase shifting in response to the two phase-shifting control signals. A multiplexer (14) selects one of the phase-shifter high frequency clocks in response to the carrier phase signals. A signal selector (15) converts the selected phase-shifted high frequency clock signal into a pulsewidth-modulated clock signal. The signal filter (16) provides the PSK/FSK data signal by integrating the pulsewidth-modulated clock signal and also provides band pass filtering to clean up the waveform. Clocks generator 197 generates the clocks listed in Table 9. PWMA logic 190 contains a CLX generator, a scrambler, a dibit encoder, a finite impulse response (FIR) filter, and a multiplexer

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(MUX) similar to those previously described. The logic equation for FA, in the PSK, FSK, and AT modes is: $OEQU3W$ where XOR denotes the exclusive-or operation. TIA, T2A, T3A and their negated forms NTIA, NTZA, and NT3A correspond to T1, T2, T3 and their negated forms, respectively, of FIG. 3. Clocks Q1 through Q5 are as shown in Table 9. The frequency of TIA, T2A, T3A and their negated forms will be either 1200 Hz (originate) or 2400 Hz (answer) in the PSK mode. It should be recalled that, in the PSK mode, the phase of TIA and NTIA may undergo 0.degree., 90.degree., 180.degree., or 270.degree. phase shift, depending upon the serial data input stream. Note that $FA.sub.PSK \text{ XOR } Q1$ yields five possible duty cycles: 0.0, 0.297, 0.5, 0.703, and 1.0. The 0.5 value represents the 0 volt output state of XFILTER 213 and appears at idle (no data) and in conjunction with certain 180.degree. and 270.degree. phase shifts of TIA such that TIA, T2A, T3A=101 or 010.

3. Claims 58-62 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 35-56 are allowed.

5. This action is a **final rejection** and is intended to close the prosecution of this application. Applicant's reply under 37 CFR 1.113 to this action is limited either to an appeal to the Board of Patent Appeals and Interferences or to an amendment complying with the requirements set forth below.

If applicant should desire to appeal any rejection made by the examiner, a Notice of Appeal must be filed within the period for reply identifying the rejected claim or claims

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appealed. If applicant should desire to file an amendment, entry of a proposed amendment after final rejection cannot be made as a matter of right unless it merely cancels claims or complies with a formal requirement made earlier. Amendments touching the merits of the application which otherwise might not be proper may be admitted upon a showing a good and sufficient reasons why they are necessary and why they were not presented earlier.

A reply under 37 CFR 1.113 to a final rejection must include the appeal from, or cancellation of, each rejected claim. The filing of an amendment after final rejection, whether or not it is entered, does not stop the running of the statutory period for reply to the final rejection unless the examiner holds the claims to be in condition for allowance. Accordingly, if a Notice of Appeal has not been filed properly within the period for reply, or any extension of this period obtained under either 37 CFR 1.136(a) or (b), the application will become abandoned.

6. Applicant's arguments filed 12/7/04 have been fully considered but they are not persuasive. Applicant recites "specifically, the Cressey reference does not teach converting a sampled data stream into a duty cycle modulated signal stream and filtering that stream with an finite impulse response (FIR) having a transfer function for ***attenuating multiples of the resulting duty cycle modulation frequency.***

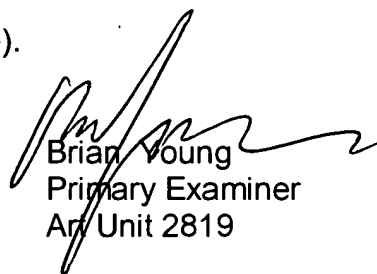
However, claim 57 does not recite the limitation of "a transfer function for attenuating multiples of the resulting duty cycle modulation frequency". Claims 35,49, and 54 do contain this limitation.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Young whose telephone number is 571-272-1816. The examiner can normally be reached on Mon-Fri 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Tokar can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brian Young
Primary Examiner
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